

maintaining the antigen in the mammal's lymphatic system over time sufficient to sustain the CTL response.

73. (New) The method of Claim 72, wherein the antigen is provided in the form of a polypeptide.

74. (New) The method of Claim 72, wherein the antigen is provided as a component of a microorganism.

75. (New) The method of Claim 72, wherein the antigen is provided in the form of a nucleic acid encoding the antigen.

76. (New) The method of Claim 75, wherein the nucleic acid encoding the antigen comprises a plasmid, a vector, or a recombinant viral vector.

77. (New) The method of Claim 72, wherein the antigen is maintained by sustained, delivery of the antigen.

78. (New) The method of Claim 72, wherein the antigen is a diseased matched antigen.

79. (New) A method of obtaining a sustained CTL response in a mammal, which method comprises:

selecting an antigen suitable for a sustained CTL response in the mammal;
delivering the antigen to a lymphatic system of the mammal at a level sufficient to induce a CTL response in the mammal;
causing sustained exposure of the antigen to the mammal's lymphatic system;
obtaining a sustained CTL response in the mammal; and
~~detecting the sustained CTL response in the mammal.~~

80. (New) The method of Claim 79, wherein the detection step comprises an assay selected from the group consisting of a cytokine assay, a chromium release assay, an antiviral protection assay, virus titer, an immunofluorescence assay, a tumor growth inhibition assay, tumor size reduction, a CTL assay, inhibition of tumor metastasis, increase in life expectancy, infectious disease recovery, and observation of the health of the mammal.

81. (New) The method of Claim 79, wherein the delivery step further comprises delivering a cytokine, adjuvant, or potentiator.

82. (New) A method of obtaining a sustained CTL response in a mammal, which method comprises:

selecting an antigen that is capable of inducing CTL in a mammal;

delivering the antigen to the mammal at a level sufficient to induce a CTL response in the mammal, wherein the antigen is delivered to an area of high lymphatic drainage in the mammal; and

maintaining the antigen in the mammal's lymphatic system sufficient to sustain the CTL response for a period of time that is substantially co-extensive with the desired duration of the CTL response.

83. (New) A method of obtaining a sustained CTL response in a mammal, which method comprises:

delivering an antigen to a lymphatic system of the mammal at a level sufficient to induce a CTL response in the mammal;

causing sustained exposure of the antigen to the mammal's lymphatic system;

obtaining a sustained CTL response in the mammal; and

detecting the sustained CTL response in the mammal.

84. (New) The method of Claim 83, wherein the detection step comprises an assay selected from the group consisting of a cytokine assay, a chromium release assay, an antiviral protection assay, viral titer, an immunofluorescence assay, a tumor growth inhibition assay, tumor size reduction, a CTL assay, inhibition of tumor metastasis, increase in life expectancy, infectious disease recovery, and observation of the health of the mammal.

85. (New) ~~The method of Claim 83, wherein the antigen is a patient-matched antigen.~~

86. (New) The method of Claim 83, wherein causing sustained exposure of the antigen to the mammal's lymphatic system comprises repeated exposure of the antigen to the mammal's lymphatic system.

87. (New) A method of obtaining a sustained CTL response in a mammal, which method comprises:

delivering an antigen in an acellular composition directly to an area of high lymphatic drainage in the mammal at a level sufficient to induce a CTL response in the mammal; and

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88. (New) The method of Claim 87, wherein the antigen in the acellular composition is provided in the form of a nucleic acid encoding a polypeptide antigen.

89. (New) The method of Claim 87, wherein the antigen is delivered as a bolus in a single dose, and wherein the single dose is sufficient to maintain the antigen in the mammal's lymphatic system over time sufficient to sustain the CTL response.

90. (New) The method of Claim 87, wherein the sustained CTL response is detectable by a CTL assay.

91. (New) The method of Claim 87, further comprising selecting an antigen in an acellular composition for delivery that is suitable for a sustained CTL response.

REMARKS

Claims 1-71 have been cancelled without prejudice and new Claim 72-91 have been added. No new matter has been added by the new claims. Support for the new claims is found in the specification and claims as originally filed.

Specifically, support for new Claim 72 is found in cancelled original Claims 1, 11 and 12, for example. Support for new Claims 73-79, 81, and 89-91 is found, for example, in the cancelled claims and in the specification at pages 17-54. Support for new Claims 79-80, 83-84, and 91 is found in the specification at pages 10-13 and 61-65, for example. Support for new Claim 82 and 87 is found in the claims as filed and in the specification at page 60, for example. Support for new Claim 85 is found in the specification at page 18, for example. Support for new Claim 86 is found, for example, in the specification in Example 8. Also, support for new Claim 88 is found, for example in the specification at page 53.

Discussion Of Rejection Under 35 U.S.C. § 112, Second Paragraph

The Office Action rejected Claims 1-21 and 39-70 under 35 U.S.C. §112, second paragraph, as being indefinite for reciting "administration of the antigen distal to the lymphatic system." The Office Action further stated that it is not clear how something can be distal to the lymphatic system. As discussed with the Examiner by telephone, Applicants assert that the